THERAPEUTICS.

UNDER THE CHARGE OF
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The Treatment of Angina Pectoris.—ALLBUTT (*Folia Therapeutica*, 1908, ii, 3) considers that in angina pectoris we have to regard three purposes: (1) To mitigate, if possible, the lesion of the aorta; (2) to reduce the stresses; (3) to block the inhibitory influence on the heart. To combat the local affection we may use antidotes, as in acute rheumatism, for instance, salicylates, or the iodides. In syphilis the latter, with or without mercury, would be required. In aortitis from such causes as influenza we have to trust to nature, but in intermediate instances, as gout, we have tolerably effectual, although empirical, methods. In relieving tension we have first the use of gentle and frequent mercurials and salines in such patients as tolerate them. Then comes the promotion of normal metabolism, first by means of exercise, which must be regulated with care. The same is true of diet; no full meal should be eaten under mental or physical fatigue and all meals should be restricted in quantity, but, on the other hand, in nstances of defective appetite, stomachics, strychnine, pepsin, hydrochloric acid, etc., may be indicated. Alcohol, strong tea, and coffee must be forbidden. The angina itself should first of all be treated by confinement to bed, but in old patients we must carefully guard against pulmonary congestion in ordering recumbency. With regard to arterial dilators, particularly glyceryl nitrate, we have a drug which must be watched, for, while Osler states that, if necessary, he is not afraid to prescribe the 1 per cent. solution in doses of 30 minims thrice daily, Allbutt has noticed a tendency to habit formation, and considers that "the physician should hold the prescription in his own hands." With regard to the iodides, unless syphilis is present, 3 to 5 grains thrice daily are sufficient. Venesection may be employed if hyperpiesis is primary and persistent. Baths, massage, and electricity, if employed at all, must be used under the strictest surveillance. In the palliation of attacks the nitrites are our chief reliance, but Allbutt urges the importance of blocking the reflex by which the heart is inhibited. This seems to be best accomplished by means of atropine, and he is accustomed to advise its administration until the liability to an attack seems to have vanished, and on the access of an attack he orders an immediate hypodermatic dose. Morphine is also a useful palliative. If Cheyne-Stokes respiration occurs, inhalations of oxygen and carbon dioxide alternately, or one of them in its appropriate interval, may be helpful.

A Pharmacological Study of Cannabis Americana.—HOUGHTON and HAMILTON (*Therapeutic Gazette*, 1908, xxxii, 26) conclude a study of Cannabis americana (Canabis sativa) as follows: (1) The method for determining the physiological activity of Cannabis sativa by internal administration to especially selected dogs has been found reliable when the standard dose, 0.01 gram per kilo of body weight of the unknown, which is reduced to a solid extract, is tested on the same animals in comparison with the same quantity of a standard U. S. P. extract by an experienced observer. (2) Cannabis sativa, when grown in various localities of the United States and Mexico, is found to be fully as active as the best imported Cannabis sativa, as shown by laboratory and clinical tests.

Trypsin in the Treatment of Malignant Tumors.—GRAVES (*Boston Med. and Surg. Jour.*, 1908, clviii, 121) states that it cannot be claimed that any great advance has been made in the actual cure of cancer by the use of trypsin. Nevertheless, the scientifically established fact that trypsin has a specific destructive action on the cancer cell and on the deadly ferment which it secretes, gives at least a gleam of hope that an effective method of applying it may be discovered.

Sodium Anilarsenate in Trypanosomasis.—NAEGELI-AKERBLOM and VERNIER (*Therapeutischer Monatshefte*, 1908, xxii, 77) review the experiences of various observers upon the treatment of sleeping sickness and trypanosomiasis in animals, and conclude that sodium anilarsenate (atoxyl) is less effective in these conditions, than some have believed. The drug is dangerous in large doses, sometimes causing gastric irritation, colic, vertigo, and even blindness. R. Koch advises its early use in trypanosomiasis, the diagnosis having been made upon the appearance of glandular swellings and upon the examination of the blood; he does not, however, consider the drug a specific. Sufficient dosage would seem to be 7½ grains every two days for a period of two months; this amount may be given hypodermatically. With regard to the employment of trypan-red the authors are not enthusiastic, stating that it acts less upon the parasite than upon the host.

Calcium Chloride in Hemoglobinuric Fever.—DEADERICK (*Therapeutic Gazette*, 1908, xxxii, 86) reports four instances of hemoglobinuric fever treated by calcium chloride, in which the results were not all that could have been desired. He concludes with the statement that the number of patients is too small to permit the drawing of definite inferences, but it would appear the benefits claimed by Vincent for the treatment were not obtained. Two of the patients died, and in both death was due to exhaustion resulting from the hemolysis, the very process which calcium chloride is used to combat. Deaderick considers the treatment worthy of further trial.

Salicylate Preparations in Bronchial Asthma.—VON GRESIC (*Klinisch-therpeautische Wochenschrift*, 1908, xv, 96) is accustomed to employ aspirin in all cases of bronchial asthma since he obtained a rather remarkable result in a patient who had suffered from the affection for many years and who experienced striking relief from a marked asthmatic seizure following the administration of 15 grains of the drug; two hours after the first dose a second of equal size was given, after which the symptoms of the attack entirely subsided. Further attacks were treated in the same fashion and with considerable success. The aspirin seems to lessen the severity of the attack and to shorten its duration. In very severe attacks the addition of morphine is of advantage.

Treatment of Pleurisy with Effusion.—BARR (*Monthly Cyclopedia of Practical Medicine,* 1908, xi, 1) advises early removal of the fluid in its entirety, but before any negative pressure is established and before the patient feels any discomfort the siphon is stopped and an amount of air about equal in volume to the fluid withdrawn is introduced into the pleural cavity, then the remainder of the fluid is drawn off and a dram of 1 to 1000 adrenalin solution, diluted with about twice this amount of normal saline solution, is injected, and if it seems necessary more air is introduced to make the total amount equal to half or three-fourths of the bulk of the fluid withdrawn; the larger quantity of air is introduced in tuberculous patients. A siphon is preferable to an aspirator, because its force can be regulated and its negative pressure never exceeds 1 pound to the square inch. The adrenalin solution is introduced to contract the bloodvessels and to lessen the secretion, but its effect is not prolonged, and consequently it cannot be expected to lessen the secretion for any great length of time if there be a great negative pressure in the pleura. When the use of adrenalin is supplemented by the introduction of air, the negative pressure is lessened or abolished and the lung gradually expands as the air is absorbed.

Bismuth in Gastric Diseases.—RUAULT (*Gazette médicale de Nantes,* 1908, xxvi, 114) perscribes bismuth subnitrate in 5-drachm doses in gastric pain (cramps, the pain of ulcer, cancer, and hyper- and hypo-acidity). The bismuth is given in a single dose in the morning and is suspended in about a pint of water. After taking it the patient lies for about ten minutes upon the back, each side, and upon the abdomen, and eats nothing for at least an hour. Constipation is not induced, the large doses tending rather to regulate the bowels. The treatment is of little avail in nervous dyspepsia, but is very effectual in gastrorrhagia and fermentative conditions. The bismuth has both a local and an antiseptic action; it soothes pain and protects ulcerations, lessens their tendency to irritation, favors cicatrization, and diminishes fermentation.

The Treatment of Pruritus Vulvæ.—DALCHE (*La Quinzaine therapeutique,* 1908, viii, 505), in addition to treatment of the patient's general condition, institution of proper diet, the employment of calomel, if hepatic torpor is present, and hydrotherapeutic measures, especially the sitz bath in tepid running water, recommends various local applications, such as an ointment consisting of menthol, ¾ grain; guaiacol, 1 to 3 minims; zinc oxide, 2 drams; vaseline, 1 ounce. Ichthyol ointment is useful and very sedative in action. Powders are often effective also, especially orthoform, diodoform, and talcum. Local lesions, such as ulcerations, pustules, and the like, should receive appropriate treatment.

The Bromides in Epilepsy.—SPRATLING (*Albany Medical Annals*, 1908, xxix, 172) contends that the bromides have contributed nothing to the curability of epilepsy. If they are used at all they should not be given in doses to exceed 15 to 20 grains daily, and these amounts should be increased so slowly that bromism will not appear. It is unnecessary to cause bromic acne to get the physiological effects of the drug; 5 grains three times a day given on scientific principles is of far greater value than 20 grains at similar intervals given without heed to eliminative precautions.

The Influence of the Röntgen-rays upon Malignant Growths.—BECLERE (*La Revue médico-sociale*, 1908, ii, 13) gives the following conditions as influencing successful Röntgen-ray treatment: (1) A more or less deep situation of the different cellular elements of the tumor treated. (2) A variable degree of the sensibility of these elements to the action of the rays. (3) The rapidity of evolution of the growth or the more or less rapid multiplication of its cellular elements. (4) The integrity or the involvement of the vascular system and more especially that of the superficial or deep lymphatics of the region.

The Röntgen-rays in Sarcoma.—BABCOCK and PFAHLER (*Surgery, Gynecology, and Obstetrics*, 1908, vi, 160) state that the most potent single agent against sarcomatous growth is probably the x-rays. The rays have a destructive effect on all living tissue cells and an especially pronounced action against lymphoid and young connective tissue cells. Consequently the embryonic tissue of sarcoma is particularly vulnerable. The rays also increase the fibroconnective tissue in the area treated, and thus tend to produce a denser encapsulation of the growth and to obliterate adjacent lymphatic channels. There is no reason to believe that the rays increase the tendency to metastases. The technique should vary with the patient in hand. Usually in deep tumors the anode should be about 30 cm. from the skin; the exposure should average from twenty to fifty minutes, the application being divided between two different areas, the object being to have the rays enter from every possible direction. An old high vacuum tube is likely to give the best results, but with superficial lesions a lower and softer tube should be employed. In general, the rays measuring 6 to 8 (Benoist scale) will give best results. Usually 1 ma. of current is employed, as it is difficult to use a stronger current and keep the vacuum uniform. In protecting the skin the use of a diaphragm of sole leather interposed between the tube and skin is important. The treatment is given daily for months, or until the irritation of the skin or the disappearance of the neoplasm suggests increasing the intervals between the exposures. After apparent cure the treatment is kept up at intervals of from two to eight weeks for several years. At the outset the patient should be advised that the treatment will take a long time, and that the tendency to recurrence may only be overcome by occasional treatments for several years. The patients who show the greatest tolerance to the rays seem to do best.